# **Pioneer** sound.vision.soul

## **DIGITAL SOUND PROJECTOR**

# PDSP-1

**Operating Instructions** 

Thank you for buying this Pioneer product.

Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference. WARNING: THE APPARATUS IS NOT WATERPROOF, TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE AND DO NOT PUT ANY WATER SOURCE NEAR THIS APPARATUS, SUCH AS VASE, FLOWER POT, COSMETICS CONTAINER AND MEDICINE BOTTLE ETC. H001BEn

Replacement and mounting of an AC plug on the power supply cord of this unit should be performed only by qualified service personnel.

#### **IMPORTANT** FOR USE IN THE UNITED KING-

DOM. The wires in this mains lead are coloured in accordance with the following code : Green and Yellow : Earth Blue : Neutral

Brown : Live If the plug provided is unsuitable for your socket outlets, the plug must be cut off and a suitable plug fitted. The cut-off plug should be disposed of and must not be inserted into any 13 amp socket as this can result in electric shock. The plug or adaptor or the distribution panel should be provided with 5 A fuse. As the colours of the wires in the mains lead of this appliance may not correspond with coloured markings identifying the terminals in your plug, proceed as follows; The wire which is coloured green and yellow must be

The wire which is coloured green and yenow must be connected to the terminal in the plug which is marked with the letter E or by the earth symbol (), or coloured green or green and yellow. The wire which is coloured blue must be connected to

the terminal which is marked with the letter N or coloured black.

to the terminal which is marked with the letter L or coloured red.

The wire which is coloured brown must be connected

After replacing or changing a fuse, the fuse cover in the plug must be replaced with a fuse cover which corresponds to the colour of the insert in the base of the plug or the word that is embossed on the base of the plug, and the appliance must not be used without a fuse cover. If lost replacement fuse covers can be obtained from: your dealer. Only 5 A fuses approved by B.S.I. or A.S.T.A to B.S. 1362 should be used. HO04EEn

This product complies with the Low Voltage Directive (73/23/ EEC, amended by 93/68/EEC), EMC Directives (89/336/EEC, amended by 92/31/EEC and 93/68/EEC). H015AEn

WARNING: BEFORE PLUGGING IN THE UNIT FOR THE FIRST TIME, READ THE FOLLOWING SECTION CAREFULLY. THE VOLTAGE OF THE AVAILABLE POWER SUPPLY DIFFERS ACCORDING TO COUNTRY OR REGION. BE SURE THAT THE POWER SUPPLY VOLTAGE OF THE AREA WHERE THIS UNIT WILL BE USED MEETS THE REQUIRED VOLTAGE (E.G., 230V OR 120V) WRITTEN ON THE REAR PANEL.

#### INSTALLATION

**Note:** Reference is made to ISO/IEC Guide 37 [12]. **VENTILATION:** 

- When placing this unit with using optional stand or wall-mount kit, make sure to leave space around the unit for ventilation to improve heat dispersal at least 3 cm at the rear. If not enough space is provided between the unit and walls or other furniture, heat will build up inside, interfering with performance and/or causing malfunctions.
- Do not cover the unit with fabric or other covering. Anything that blocks ventilation will cause the internal temperature to rise, which may lead to breakdown or fire hazard.
- The rear of unit may become hot while in use, please take care around it.

**WARNING:** Slot and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, to prevent fire hazard, the openings should never be blocked and covered with items, such as newspapers, table-cloths, curtains, etc. Also do not put the apparatus on the thick carpet, bed, sofa, or fabric having a thick pile.

**WARNING:** NO NAKED FLAME SOURCES, SUCH AS LIGHTED CANDLE, SHOULD BE PLACED ON THE APPARATUS. IF NAKED FLAME SOURCES ACCIDENTALLY FALL DOWN, FIRE SPREAD OVER THE APPARATUS THEN MAY CAUSE FIRE.

H044 En

#### **Operating Environment**

H045 En

Operating environment temperature and humidity:

 $\pm$ 5°C -  $\pm$ 35°C ( $\pm$ 41°F -  $\pm$ 95°F); less than 85%RH (cooling vents not blocked)

Do not install in locations exposed to strong sunlight, strong artificial light, high humidity or locations that have poor ventilation.

**Note:** The unit must be installed in such a way that it is possible to easily disconnect the mains plug.

**CAUTION:** To prevent injury, this apparatus must be securely attached to the appropriate Pioneer stands (model numbers B-PDSP-H, B-PDSP-L or BPDSP-W) in accordance with the installation instructions. Use with other apparatus is capable of resulting in instability causing possible injury.

WARNING: THIS PRODUCT EQUIPPED WITH A THREE-WIRE GROUNDING TYPE PLUG, A PLUG HAVING A THIRD (GROUNDING) PIN, IT WILL ONLY FIT INTO A GROUNDING TYPE POWER OUTLET. THIS IS A SAFETY FEATURE. IF YOU ARE UNABLE TO INSERT THE PLUG INTO THE OUTLET, CONTACT YOUR ELECTRICIAN TO REPLACE YOUR OBSOLETE OUTLET. DO NOT DEFEAT THE SAFETY PURPOSE OF THE GROUNDING TYPE PLUG. H043 EM

**CAUTION:** To disconnect the unit from the mains supply unplug the mains plug. Install the unit in such a way that it is easy to disconnect the mains plug in case of an accident. The mains plug of the unit should be unplugged from the wall socket when left unused for a long period of time.

This product is for general household purposes. Any failure due to use for other than household purposes (such as long-term use for business purposes in a restaurant or use in a car or ship) and which requires repair will be charged for even during the warranty period. Contents

Features

H003 En



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated 'dangerous voltage' within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



#### CAUTION: TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

**IMPORTANT SAFETY INSTRUCTIONS** 

1) Read these instructions.

2) Keep these instructions.

3) Heed all warnings.

4) Follow all instructions.

5) Do not use this apparatus near water.

6) Clean only with dry cloth.

7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

11) Only use attachments/accessories specified by the manufacturer.

12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



13) Unplug this apparatus during lightning storms or when unused for long periods of time.

14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

#### [For U.S. model] IMPORTANT NOTICE

The serial number for this equipment is located in the rear panel. Please write this serial number on your enclosed warranty card and keep it in a secure area. This is for your security.

**WARNING:** Handling the cord on this product or cords associated with accessories sold with the product will expose you to lead, a chemical known to the State of California and other governmental entities to cause cancer and birth defects or other reproductive harm. *Wash hands after handling.* 

#### **POWER-CORD CAUTION**

S002 En

Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock. Do not place the unit, a piece of furniture, etc., on the power cord, or pinch the cord. Never make a knot in the cord or tie it with other cords. The power cords should be routed such that they are not likely to be stepped on. A damaged power cord can cause a fire or give you an electrical shock. Check the power cord once in a while. When you find it damaged, ask your nearest PIONEER authorized service center or your dealer for a replacement. **NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- -Reorient or relocate the receiving antenna.
- -Increase the separation between the equipment and receiver.
- -Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -Consult the dealer or an experienced radio/TV technician for help. H010En

#### Information to User

Alteration or modifications carried out without appropriate authorization may invalidate the user's right to operate the equipment.

#### CAUTION:

This product satisfies FCC regulations when shielded cables and connectors are used to connect the unit to other equipment. To prevent electromagnetic interference with electric appliances such as radios and televisions, use shielded cables and connectors for connections.

#### Maintenance of External Surfaces

- Use a polishing cloth or dry cloth to wipe off dust and dirt.
- When the surfaces are dirty, wipe with a soft cloth dipped in some neutral cleanser diluted five or six times with water, and wrung out well, and then wipe again with a dry cloth. Do not use furniture wax or cleaners.
- Never use thinners, benzine, insecticide sprays or other chemicals on or near this unit, since these will corrode the surfaces. K023En

#### **Regarding Installation**

This product is sold with the understanding that it will be installed and calibrated only by a trained service professional with specialized technical skills. When installing this unit, be sure to consult a professional installer or your dealer. Pioneer disclaims all responsibility for any losses resulting from improper installation, misuse of, modifications or damage to this unit.





#### Dear Customer:

Selecting fine audio equipment such as the unit you've just purchased is only the start of your musical enjoyment. Now it's time to consider how you can maximize the fun and excitement your equipment offers. This manufacturer and the Electronic Industries Association's Consumer Electronics Group want you to get the most out of your equipment by playing it at a safe level. One that lets the sound come through loud and clear without annoying blaring or distortion-and, most importantly, without affecting your sensitive hearing.

Sound can be deceiving. Over time your hearing "comfort level" adapts to higher volumes of sound. So what sounds "normal" can actually be loud and harmful to your hearing. Guard against this by setting your equipment at a safe level BEFORE your hearing adapts.

#### To establish a safe level:

- Start your volume control at a low setting.
- Slowly increase the sound until you can hear it comfortably and clearly, and without distortion.

#### Once you have established a comfortable sound level:

Set the dial and leave it there

Taking a minute to do this now will help to prevent hearing damage or loss in the future. After all, we want you listening for a lifetime.

#### We Want You Listening For A Lifetime

Used wisely, your new sound equipment will provide a lifetime of fun and enjoyment. Since hearing damage from loud noise is often undetectable until it is too late, this manufacturer and the Electronic Industries Association's Consumer Electronics Group recommend you avoid prolonged exposure to excessive noise. This list of sound levels is included for your protection.

#### Decibel

- Level Example
- 30 Quiet library, soft whispers
- 40 Living room, refrigerator, bedroom away from traffic
- 50 Light traffic, normal conversation, quiet office
- 60 Air conditioner at 20 feet, sewing machine
- 70 Vacuum cleaner, hair dryer, noisy restaurant
- 80 Average city traffic, garbage disposals, alarm clock at two feet.

### THE FOLLOWING NOISES CAN BE DANGEROUS UNDER CONSTANT EXPOSURE

- 90 Subway, motorcycle, truck traffic, lawn mower
- 100 Garbage truck, chain saw, pneumatic drill
- 120 Rock band concert in front of speakers, thunderclap
- 140 Gunshot blast, jet plane
- 180 Rocket launching pad

Information courtesy of the Deafness Research Foundation.





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#### **Regarding Installation and Initial Settings**

All aspects of installation, connection, and initial surround calibration and setup of the Pioneer Digital Sound Projector PDSP-1 are to be performed by trained service personnel. Please consult your dealer if you want to change the installation location, or if major modifications are required to the initial calibration settings.

### **Features**

This digital sound projector is a totally new product unlike conventional home theater systems. It produces multichannel surround sound from a single speaker array, without the need for numerous speaker settings and wiring hassles.

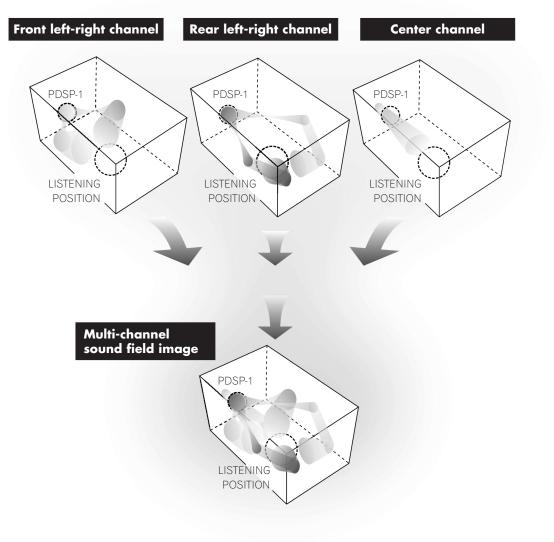
The following section introduces the features that enable the PDSP-1 to produce its remarkable new sound.

### 1. Beam control technology BEAM CONTROL

254 individually driven speaker units are arranged in an array on a single panel, and the directionally controlled audio from this array is radiated in a beam. The sound of each channel radiated in this beam utilizes the reflectivity of ceiling and walls to produce multi-channel sound.

#### Audio beam image

The accompanying illustration depicts the way in which the sound beam radiated from the PDSP-1 arrives at the listening position. In this way, surround sound is produced that totally envelops the listener.



#### 2. Sound settings to match your room's characteristics

The professional installation technician uses a special metering microphone and computer to set up the unit with the optimum sound response and characteristics for your room. Since multiple sound settings are possible for any room, this unit makes it possible for you to call up preset sound environments to change the sound field in accordance with listening conditions.

#### 3. Equipped with Dolby Digital and Pro Logic II, Digital Theater System (DTS) Decoder

In addition to Dolby Digital – the DVD video standard audio format – this unit also supports Dolby Pro Logic II, which allows you to play 2-channel sources with multi-channel ambience, and DTS, which produces high sound quality with low compression ratios and high transmission rates. These features allow you to enjoy multi-channel movie-theater ambience inside your own home.

Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic", and the double-D symbol are trademarks of Dolby Laboratories.

"DTS" and "DTS Digital Surround" are registered trademarks of Digital Theater Systems, Inc.

Manufactured under license from 1 Ltd. World-wide patents applied for. The "O" logo and "Digital Sound Projector" are trademarks of 1 Ltd.



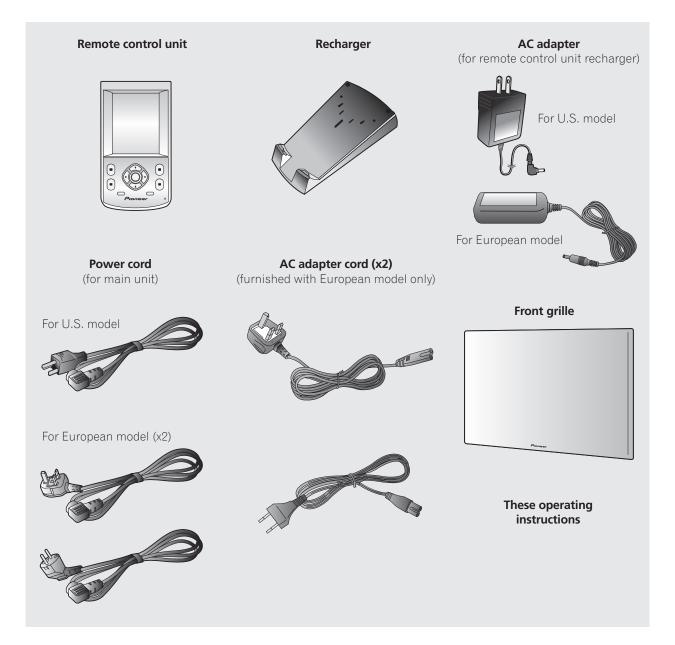


"Selecting the Audio Mode" (Dolby Pro Logic II ) → P25

7

### Confirm All Accessories

The digital sound projector is provided with the following accessories:



#### Note:

When disposing of used batteries, please comply with governmental regulations or environmental public instruction's rules that apply in your country or area.

H048 En

#### Caution:

Danger of explosion if battery is incorrectly replaced. Replaced only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

H027A En

### **Specifications**

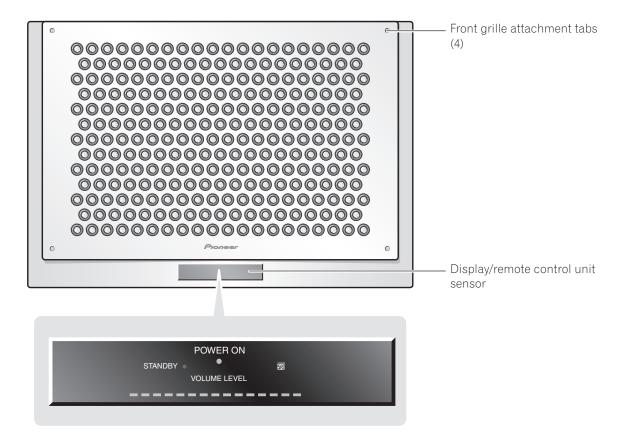
Audio Section	Rated output (RMS, 80 Hz – 20 kHz)	2 W x 254 units	
	Maximum output (80 Hz – 20 kHz, 1 m)	115 dBspl	
	Tone control: BASS (40 Hz – 320 Hz)	± 12 dB	
	TREBLE (6.3 kHz – 16 kHz)	± 12 dB	
	Sub-woofer crossover frequency	40 Hz – 200 Hz	
	Output level / impedance	1.0 Vp-p / 100 <b>Ω</b>	
	Input sensitivity / impedance	150 mVp-p / 47 k <b>Ω</b>	
	Speaker response	80 Hz – 20 kHz, ± 3dB	
Video Section	Video connectors (level / impedance)	1.0 Vp-p / 75 <b>Ω</b>	
	S/N ratio	55 dB	
	Frequency response (output connectors)	5 Hz – 10 MHz, –3 dB	
Power Section	Power source	AC 120 V, 60 Hz (U.S. model)	
		AC 100 – 240 V, 50/60 Hz (European model)	
	Power consumption	750 W	
	Power consumption in standby mode	3 W	
External Dimensions		963 (W) x 640 (H) x 146 (D) mm	
		(37- <sup>15</sup> / <sub>16</sub> (W) x 25- <sup>4</sup> / <sub>16</sub> (H) x 5- <sup>12</sup> / <sub>16</sub> (D) in.)	
Weight of Main Unit		50 kg (110 lb 4 oz) (including front grille)	
Accessories	Remote control unit		
	Recharger		
	AC Adapter (AC 120 V, 50/60 Hz, rated volta	age 6 V) (U.S. model)	
	(AC 100 – 240 V, 50/60 Hz, rated voltage 6 V) (European model)		
	AC adapter cord (furnished with European model only)		
	Power cord		
	Front grille		
	Operating Instructions		

#### Note:

Specifications and the design are subject to possible modifications without notice, due to improvements.

### Front Panel

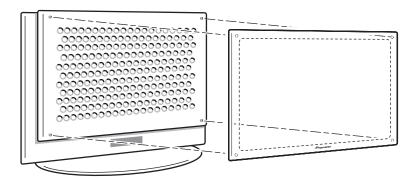
Indicators for power and volume level, and the remote control unit sensor are located on the lower part of the panel.



Display	Meaning/Operation
POWER ON (Blue)	Lights when power is turned ON
STANDBY (Red)	Lights in power standby mode
VOLUME LEVEL	Indicates sound volume

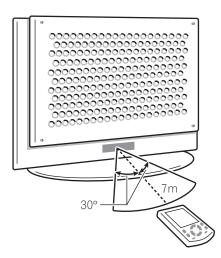
#### Attaching the Front Grille

Align the grille with the four attachment tabs on the front panel, then push into place.



#### Range of the Remote Control Unit

Operate the remote control unit while pointing it toward the Digital Sound Projector's remote control sensor within the range shown.

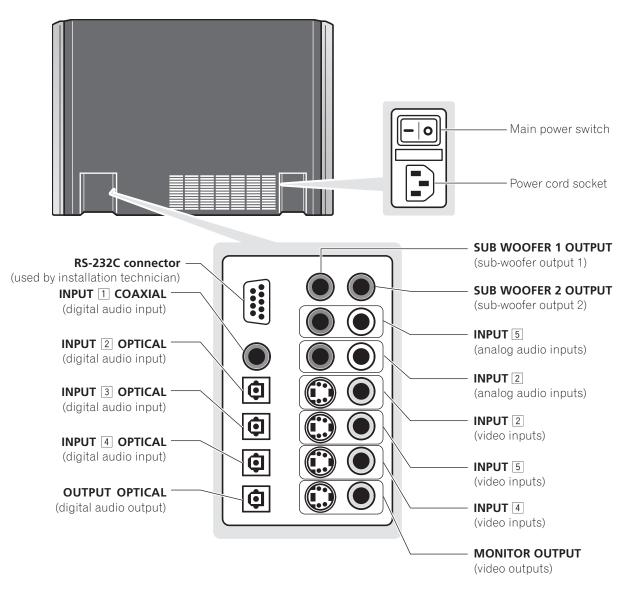


#### Caution:

Do not expose the remote control sensor to direct sunlight or other strong light sources.

### Rear Panel

The main power switch, power cord socket, and input/output connectors are located on the rear panel.



#### Turning the Main Power ON/OFF

- Connect the supplied power cord to the rear panel power cord socket, and then insert the plug in a household power outlet.
- **2** Turn the main power ON/OFF by setting the main power switch to the [–] (ON) or [o] (OFF) sides.

#### Caution:

Do not use any power cord other than the one supplied.

#### About the Input/Output Connectors

#### Caution:

Before making or changing the connections, switch off the power and disconnect the power cord from the AC outlet.

#### Audio output (OUTPUT OPTICAL connector)

Use to connect MD recorders, CD recorders and other digital recording components. These connectors output the digital signals from inputs 1 to 4.

#### Video outputs (MONITOR OUTPUT connectors)

Use to connect a television monitor or other video component.

#### Note:

The selection of S or composite connectors should match the selection on the signal input side. (If an S2 video input is used, use the S output connector; if the input is composite, use the composite output connector as well).

#### SUB WOOFER OUTPUT connectors

Up to two sub-woofers can be connected.

#### Note:

Sub-woofers reproduce very low-frequency sound; coupled with the LFE (Low-Frequency Effect) channels encoded in Dolby digital and DTS audio sources, these speakers produce sounds effects which heighten the impact and realism of motion picture sound tracks and other sources.

#### **INPUT** 1 – 5 connectors

The digital sound projector is equipped with 5 input connector systems which can be combined in the ways shown below. The various inputs can be selected by using the [INPUT] to [INPUT] buttons on the remote control unit.

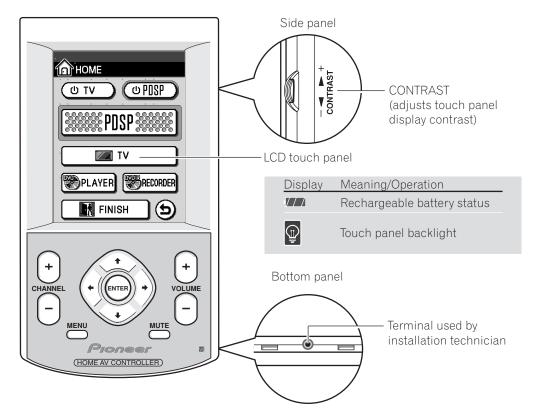
INPUT	Audio Connector	Video Connector	
1	Coaxial digital	– (no video)	_
2	Optical digital/analog	S / Composite	
3	Optical digital	– (no video)	
4	Optical digital	S / Composite	
5	Analog	S / Composite	

#### Note:

Input 2 provides for automatic sensing of digital and analog sources. In the event that both digital and analog signals are simultaneously input to the digital sound projector, the digital signal is given priority.

### Remote Control Unit

The touch panel appears when the LCD touch panel is touched or a remote control unit button (hard key) is pressed.



#### About the Remote Control Unit Buttons (hard keys)

Button	Meaning/Operation
CHANNEL	Use to select channels
MENU	Use to turn the menu display ON/OFF
ENTER	Use to select and input menu display operations
VOLUME	Use to adjust sound volume level
MUTE	Use to temporarily turn off sound

#### Note:

The remote control unit buttons (hard keys) differ in function depending on which component has been selected on the touch panel. For details, see the section "Table of Remote Control Unit Menu Displays" (P40).





"Touch panel menus don't change" "Resetting the Remote Control Unit" ⇒ P39

#### Setting the Basic Information on the Remote Control Unit

Seven items, including current time display and beep volume can be set on the remote control unit.



#### Set the touch panel to the 🏠 HOME menu.

If the touch panel shows any display other than the HOME menu, press the 🙆 mark at the bottom.





#### Press the "@" mark at the top left.

The setting menu will be displayed.

Use the arrows  $\Leftarrow \Rightarrow$  on the touch panel to switch between the two menu screens.

SETUP 1/2	SETUP 2/2
CLOCK DISPLAY: AM/PM	LCD TIMEOUT
CLOCK SETTING	BACKLIGHT TIMEOUT
BEEP: (10)	CALIBRATE
← @ 9 →	€ @ 9 +

3

Follow the instructions on the screen to change the items you want.

Item	Select	Setting Contents
CLOCK DISPLAY	12-hour or 24-hour display	Type of clock display
CLOCK SETTING	Year/Month/Day/Hour/Minute	Date and Time
BEEP	<b>◀ ›) / ◀ ›))</b> /OFF	Sound volume of beep when touch panel is pressed
LCD TIMEOUT	20-120 seconds	Touch panel OFF time (if no remote control unit operation is performed during the set time, the display will automatically turn off to conserve power).
BACKLIGHT TIMEOUT	20-120 seconds	How long the display illumination remains on when 😰 is pressed.
CALIBRATE		Fine adjustment of display screen position

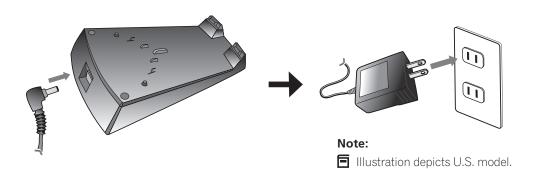
4

Once the settings are completed, press or .

The screen returns to the HOME menu.

Recharging the Remote Control Unit

**1** Connect the accessory AC adapter to the recharger and a household AC outlet.



**Place the remote control unit on the recharger, aligning the indents on the remote control unit with the tabs on the recharger.** 



#### Note:

During recharging, the indicator shown below will appear on the upper right corner of the display.

Recharging indicator



**Caution: ①** Do not use AC adapters other than the one supplied.



### Using the Remote Control Unit

The remote control unit's buttons and touch panel can be used to control components connected to the digital sound projector.

#### Component Operation Menu Display

When using the remote control unit to control the digital sound projector and video components, menu displays are provided for the current component being used. The remote control unit has the following component menu displays:

Operation Menu	Meaning/Contents
<b>П</b> НОМЕ	HOME menu
PDSP	Operate Digital Sound Projector
TV	Operate television monitor
🐯 DVD PLAYER	Operate DVD player
UVD RECORDER	Playback/edit on Pioneer DVD recorder
REC DVD RECORDER	Record on Pioneer DVD recorder

#### Note:

The currently selected menu screen can be confirmed by looking in the upper left corner of the touch panel.

Current menu screen indicator





Using the Remote Control Unit

Watching Television

#### About the HOME Menu

This is the basic touch panel menu. From this menu screen, the operating menus for various connected components can be selected.

I HOME
UTV UPDSP
<b>******</b> PDSP <b>*****</b>
PLAYER

Display	Meaning/Operation
UTV	Turns television power ON/OFF
(U PDSP)	Turns digital sound projector power ON/OFF
EXAMPLE PDSP	Selects the digital sound projector operating menu ( $\Rightarrow$ P19)
TV	Selects the TV operating menu ( $\Rightarrow$ P21)
PLAYER	Selects the DVD player operating menu ( $ ightarrow$ P22)
RECORDER	Selects the DVD recorder operating menu ( $\Rightarrow$ P24)
FINISH	Turns off power to all connected components
٢	Returns to previous menu



#### About the PDSP (digital sound projector) menu

When using the digital sound projector with other components, this menu screen is used to select operation of other components. This menu is also used to select signal inputs (input 1 to 5).

PDSP
UPDSP UTV TV
INPUT1 INPUT2 INPUT3
INPUT4 INPUT5 INPUT
MONO STEREO SURR.

Display	Meaning/Operation
(UPDSP)	Turns digital sound projector power ON/OFF
	Turns television power ON/OFF
INPUT 1 — INPUT 5	Selects input 1 to 5
INPUT	Alternates between inputs 1 to 5
TV	Selects the TV operating menu (➡ P21)
DYD	Selects the DVD player operating menu ( $\Rightarrow$ P22)
DVR	Selects the DVD recorder operating menu ( $\Rightarrow$ P24)
t	Returns to previous menu
	Returns to HOME menu



#### Operating Menus for Other Components

Use the operating menus for connected components (DVD player, television, etc.) according to the typical functions and operations of the respective component. Other operating menu items appear as follows:

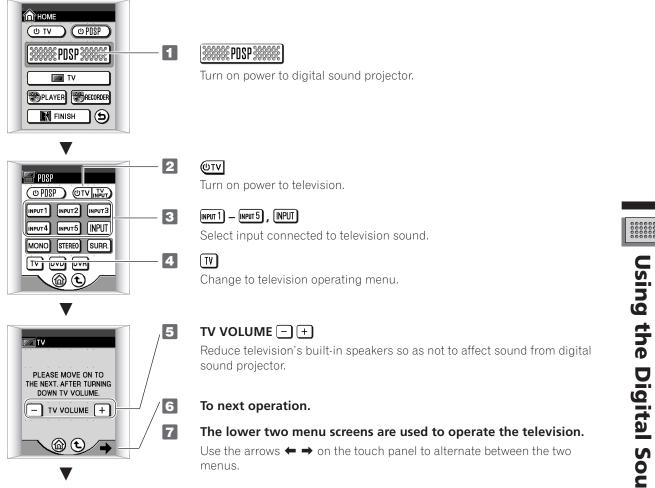
#### Example: Television Operating Menu



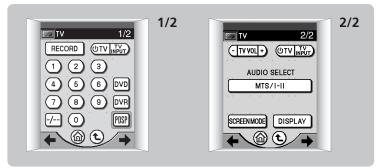
Display	Meaning/Operation
POSP	Selects the PDSP menu (➡ P19)
RECORD	Selects the recording menu for DVD recorder ( $ ightarrow$ P23)
	Returns to HOME menu
t	Returns to previous menu
$\leftarrow \rightarrow$	Changes between the menu screens (1/2, 2/2)

### Watching Television

Use this menu to operate a connected television.



Television Operating Menus (2 screens)



#### Note:

🗖 When TV 🖾 is pressed in step 1, the television operating screen shown in 7 appears, and the television can be operated without using the digital sound projector. Note that in this case, the (1990) item does not appear on the 2/2 menu, with the result that the remote control unit's volume button (hard key) must be used to adjust the television sound volume.

P

"About the Remote Control Unit Buttons (hard keys)" ➡ P14

**P** 

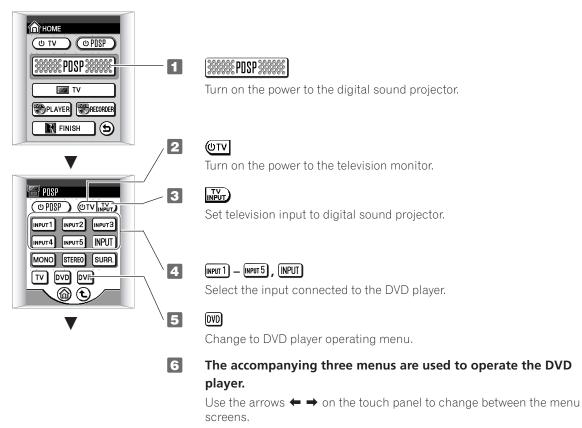
"Table of Remote Control Unit Menu Displays" ➡ P40

Using the Remote Control Unit

Watching Television

### Watching a DVD

Use this menu to operate a connected DVD player.



#### DVD Player Operating Menus (3 screens)



#### Notes:

- If a Pioneer DVD player is connected, the DVD player's power will turn on in step 5.
- F If **BRAVER** is pressed in step **1**, the DVD player operating menus shown in step **6** will appear, and it will be possible to operate the DVD player without using the digital sound projector.

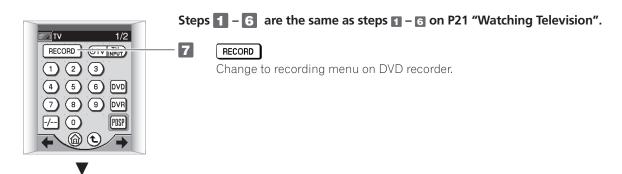


### Using a Pioneer DVD Recorder

Use this menu to operate a connected Pioneer DVD Recorder.

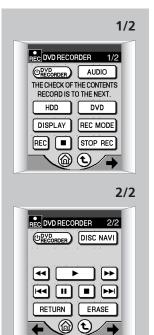
#### Recording

To record the program currently playing on the television, follow the steps listed below.



DVD Recorder: Recording Menu (2 screens)

8



#### Perform recording operations on menu 1/2 at left.

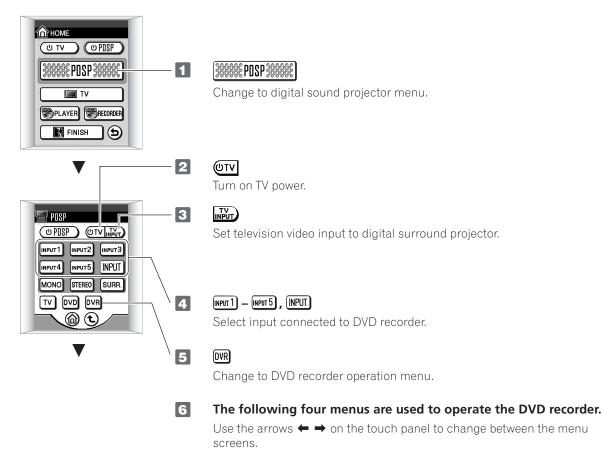
HDD/DVD: DISPLAY: REC MODE: AUDIO: REC:	Selects type of disk for recording (HDD/DVD) Displays disc information Selects recording mode FINE/SP/LP/EP Selects audio channel for recording (main/sub)
REC:	Starts recording
STOP REC:	Stops recording

#### Note:

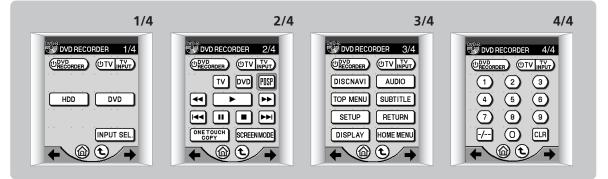
■ Press → on the first screen to change to menu screen 2/2; this menu allows playback and confirmation of recorded contents.



#### Playback/Editing



#### DVD Recorder Operating Menus (4 screens)



#### Note:

When when is pressed in step 1, the DVD recorder operating menu shown in 6 appears, and the DVD recorder can be operated without using the digital sound projector.

#### Caution:

Some operations may not be possible, depending on the specific model of Pioneer DVD Recorder connected.

### Selecting the Audio Mode

#### Listening to Stereo Sound in Surround Mode

Stereo broadcasts, CD playback and other 2-channel sounds can be enjoyed in surround sound mode.

1

#### Set the touch panel to the 🚰 PDSP menu.

From the HOME menu, press III PISP III ; from other menus, press

PDSP	PDSP menu
UPDSP UTV INPUT	
INPUT1 INPUT2 INPUT3	
INPUT4 INPUT5 INPUT	
MONO STEREO SURR.	
TV DVD DVR	

2

#### Press SURR.

The television screen will display the audio mode. Each time the button is pressed, the audio mode will change in the following order.

PLII Movie	<b>PLII Movie: Pro Logic II Movie</b> This mode is designed for use with film soundtracks, and allows actors' dialogue to be heard from the most natural direction.
PLII Music	<b>PLII Music: Pro Logic II Music</b> This mode is designed for use with music sources. The surround effect recreates the ambience experienced in live performances.
Pro Logic	<b>Pro Logic:</b> The Pro Logic Mode is generally designed for general use with movie soundtracks. The rear channel track is heard in monaural surround.
Stereo	<b>Stereo:</b> The stereo mode is a two-channel mode; when this mode is selected, even multi-channel sources are played back in two channels, and heard from the front right and left.
otes:	

#### Notes:

F If SURR is pressed during playback of Dolby Digital and other surround sources, the following message will be displayed:



F If STERED is pressed in step 2, the unit will change to stereo mode.

#### Enhancing Monaural Sources

When listening to older movies and CDs, and other sources recorded in monaural sound, the sound will seem more natural when heard from the center channel alone, rather from the front two channels (right and left).



#### Set the touch panel to the 🚰 PDSP menu.

From the HOME menu, press 🗱 PDSP 🗱; from other operation menus, press 🔤.



#### Press MONO

The "Mono" indicator will appear on the television screen. Each time the button is pressed, the monaural mode alternates between ON and OFF.

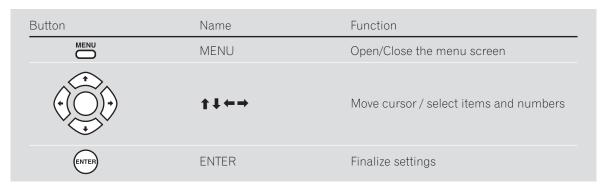
Mono

#### Caution:

When adjusting the digital sound projector's sound, the menu screen is displayed on the connected television monitor. To see the display, turn on the television's power and set the television's video input to the digital sound projector.

#### Note:

When adjusting the digital sound projector's sound, use the following buttons (hard keys) of the remote control unit:



### Changing Surround Sound

You can adjust each channel's volume/balance while listening to the actual sound, as well as adjusting the subwoofer and other options.

#### Test Signal

2

A test signal can be used to adjust the output level of each channel.

#### **1** Use the touch panel to select the **2** PDSP menu.

From the HOME menu, press ......; from other menus, press ......

#### Press the MENU button.

The following "System Setup" menu appears.

#### System Setup

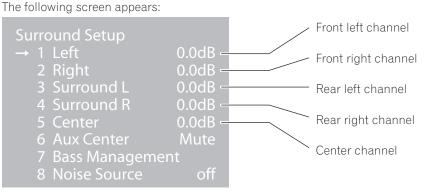
- I Surround Setu
  - 2 All Ch Tone Control
  - 3 Recall Memory
  - 4 Linsvnc delav
  - 5 Stereo Mode
  - 5 Stereo Mode





Changing Surround Sound	Adjusting the Tone	Calling Up a Room Sound Setting	Video and Audio Timing Compensations	Adjusting Surround Effects	Displaying the Data Screen

#### **3** Using the **↑**↓ ← → buttons, select "Surround Setup", and press the ENTER button.



#### Note:

"Aux Center" is an additional center channel. To use the "Aux Center" channel, a special dedicated setting is required; consult your installation service personnel.

4

Using the ↑↓ ← → buttons, select "Noise Source", and press the ENTER button. The following screen appears:

Noise Source → 1 Off 2 Left 3 Right 4 Surround L 5 Surround R 6 Center 7 Aux Center 8 LFE

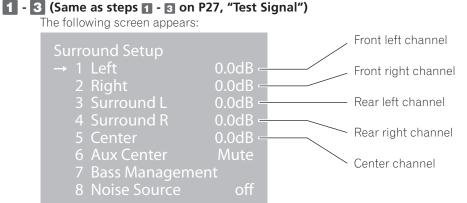
```
5
```

Using the  $\uparrow \downarrow \leftarrow \Rightarrow$  buttons, select the channel, and press the ENTER button.

The test signal will be produced from the selected channel.



#### Changing Each Channel's Output Level



Using the ↑↓←→ buttons, select the desired channel, then press the ENTER button. The following screen appears:

Left
†↓→ ← to edit Press ENTER or MENU to exit
Level 0.0dB

**5** Using the  $\uparrow \downarrow \leftarrow \rightarrow$  buttons, adjust the output level as desired, then press the ENTER button. Adjust the output level while listening to the test signal.

Setting range: 0.0 dB – 12.0 dB

Note:

When you're finished, you can press the MENU button repeatedly to return to previous screens.

Changing	A
Surround Sound	Adju

#### Sub Woofer / Bass Management

This menu allows you to set the unit for a sub-woofer, and LFE channel ON/OFF.

```
1 - 3 (Same as steps 1 - 3 on P27, "Test Signal")
```

```
4
      Using the \uparrow \downarrow \leftarrow \Rightarrow buttons, select "Bass Management", and press the ENTER button.
      The following screen appears:

    LFE channel output level

           2 LFE Level
   Notes:
   E LFE means "Low Frequency Effect".
   the output level.
       Setting range: 0.0 dB - 12.0 dB
5
      Using the \uparrow \downarrow \leftarrow \Rightarrow buttons, select "Sub Woofer", then press the ENTER button.
      The following screen appears:
                                                    Sub Woofer: No
                                                    (LFE will not be output from any channel)
                                                    Sub Woofer: No/LFE to panel
           2 No/LFE to panel
```

Sub Woofer: Yes (LFE is output to Sub Woofer)

(LFE is output from digital sound projector)

G Using the ↑↓ ← → buttons, select either "No," "No/LFE to panel," or "Yes," then press the ENTER button.

#### Note:

🗐 When you're finished, you can press the MENU button repeatedly to return to previous screens.



You can adjust the overall tone for all audio channels.

1	<b>Use the touch panel to select the 齫 PDSP menu.</b> From the HOME menu press ; from other menus, press .
2	<b>Press the MENU button.</b> The "System Setup" menu screen appears.
3	Using the ↑↓ ← → buttons, select "All Ch Tone Control", and press the ENTER button. The following screen appears:
	All Ch Tone Control → 1 Bass Level OdB Bass 2 Treble Level OdB Treble
4	Using the ↑↓ ← → buttons, select either "Bass Level" or "Treble Level", then press the ENTER button. The following screen appears:
	All Ch
	↑↓→← to edit Press ENTER or MENU to exit

Adjusting the Sound

**5** Using the  $\uparrow \downarrow \leftarrow \rightarrow$  buttons, adjust the tone level as desired, then press the ENTER button.

```
Setting range: -12 dB - +12 dB
```

#### Note:

🗐 When you're finished, you can press the MENU button repeatedly to return to previous screens.



Calling Up a Room Sound Setting Video and Audio Timing Compensations

### Calling Up a Room Sound Setting

Multiple sound settings can be recorded in accordance with measured room characteristics. Select the setting that produces the optimum listening environment.



#### Use the touch panel to select the 🚟 PDSP menu.

From the HOME menu press **IMM PROFILE**; from other menus, press **IMP**.



#### Press the MENU button.

The "System Setup" menu display appears.



#### Using the $\uparrow \downarrow \leftarrow \rightarrow$ buttons, select "Recall Memory", then press the ENTER button. The following screen appears.

Recall from			
		Memory 1	
		Memory 2	
	3	Memory 3	
	4	Memory 4	
	5	Memory 5	
	6	Memory 6	
		Memory 7	
	8	Memory 8	

4

#### Using the $\uparrow \downarrow \leftarrow \Rightarrow$ buttons, select the desired sound setting, then press the ENTER button.

#### Notes:

E When you're finished, you can press the MENU button repeatedly to return to previous screens.

A maximum of eight room sound settings can be stored in memory. Consult your installation service personnel regarding the settings that will work best with your room.

Displaying the Data Screen

# Video and Audio Timing Compensations (Lipsync delay)

The video playback from some components may appear somewhat delayed from the audio channel. If actors' mouth movements appear to be out of sync with the audible soundtrack, use this adjustment to delay (compensate) the audio timing.



#### Use the touch panel to select the 🚟 PDSP menu.

From the HOME menu press **IMMPSPIME**; from other menus, press **IMP**.

#### 2

Press the MENU button.

The "System Setup" menu appears.

3 Using the ↑↓←→ buttons, select "Lipsync delay", then press the ENTER button. The following screen appears:

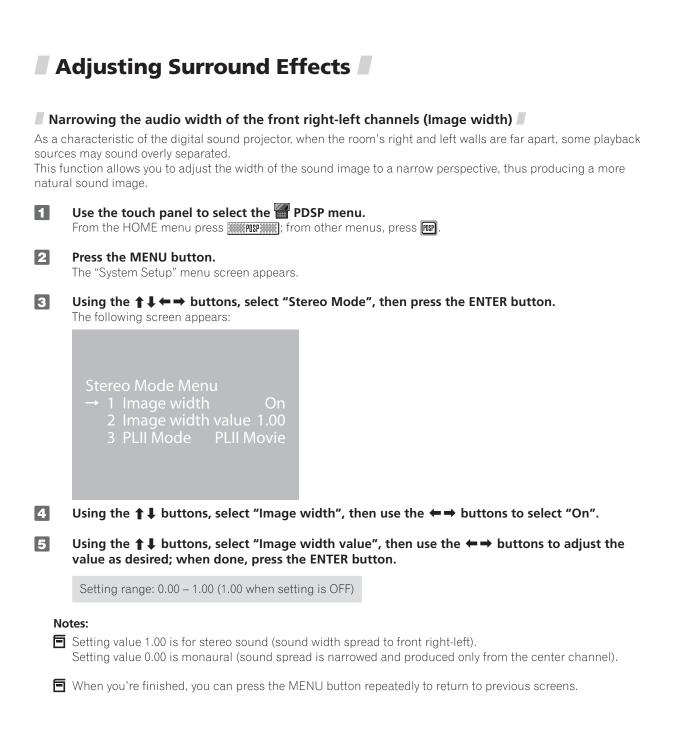
Lipsync dela	y
†↓→ ← to ed Press ENTER	it or MENU to exit
Delay	0ms

Using the ↑↓ ← → buttons, adjust the amount of delay as desired, then press the ENTER button. Perform this adjustment while confirming the actual video-audio timing.

#### Notes:

4

- The maximum adjustment value will be less than 106 ms, as a result of the initial room setting made by the service personnel.
- When you're finished, you can press the MENU button repeatedly to return to previous screens.





#### Fine Tuning the PLII Music Mode

When listening to a two-channel source in surround sound using the PLII Music mode, you can fine tune the effect from the "Stereo Mode Menu".



4

#### Use the touch panel to select the 🚟 PDSP menu.

From the HOME menu press []; from other menus, press []].

#### **2** Press the MENU button.

The "System Setup" menu screen appears.

#### **3** Using the $\uparrow \downarrow \leftarrow \rightarrow$ buttons, select "Stereo Mode", then press the ENTER button.

The following screen appears:

Stere	eo Mode Me	nu	
	Image widt	:h	Or
	Image widt	h value	1.00
3	PLII Mode	PLII M	ovie

Using the  $\uparrow \downarrow \leftarrow \Rightarrow$  buttons, select "PLII Mode", then press the ENTER button. The following screen appears:

#### PLII Mode 1 PLII Off → 2 Movie 3 Music 4 Pro Logic



- **5** Using the  $\uparrow \downarrow \leftarrow \rightarrow$  buttons, select "Music", then press the ENTER button.
- **6** Using the **↑** ↓ buttons, select "Panorama", "Center width", or "Dimension", then use the ←→ buttons to set the effect as desired.

Stereo Mode M	Лепи
1 Image wi	idth On
2 Image wi	idth value 1.00
→ 3 PLII Mod	e PLII Music
4 Panoram	a Off
5 Center w	idth 0
6 Dimensio	on 3

Display	Setting	Effect
Panorama	On/Off	The front sound image expands toward the rear as well, enveloping the listener in surround sound.
Center width	0-7	Adjusts the audible width of the center channel (0 means sound is produced from the center channel; as the numerical value rises, the sound width expands, until at 7 the sound is produced from the front right-left channels).
Dimension	0-6	Shifts the surround effect balance between front and back (0 means sound is toward the front; as the numerical value increases, the balance shifts toward the back, until at 6 it is produced from the rear channel).

#### Note:

When you're finished, you can press the MENU button repeatedly to return to previous screens.

### Displaying the Data Screen

Use this function to confirm information about the currently playing audio and video source, and room sound settings.



#### Use the touch panel to select the / PDSP menu.

From the HOME menu press **FIREP**; from other menus, press **FIRE**.



#### Press the ENTER button.

The "Status" menu screen appears as shown below.

Status	
Source	Input 2 D
Memory	
Mode	PLII Movie
Width	1.00
Mode	

Item	Contents	Display Example
Source	Input/Signal type	Input 1-5, 2D (digital), 2A (analog)
Memory	Preset sound setting	1-8, * (when a change has occurred to the called- up sound setting)
Mode	Audio mode type	PLII Movie, PLII Music, Pro Logic, Stereo, Mono
Width	Image width setting	0.00-1.00 (image width setting value), Off

3

#### After confirming the data, press the ENTER button.

The "Status" menu screen disappears.



"INPUT 1 – 5 connectors" → P13



P

"Calling Up a Room Sound Setting" (Memory 1-8) ➡ P32



"Selecting the Audio Mode" (Dolby Pro Logic II) ➡ P25



"Adjusting Surround Effects" (Image width) ➡ P34

### Troubleshooting

Many malfunctions can be the result of operating errors. If you experience trouble with the digital sound projector, use this troubleshooting guide together with thorough checks of the other components in your system. If the problem is not corrected after doing so, consult your authorized service center.

Sound Problems?	<ul> <li>No sound</li> <li>Use the remote control unit's PDSP menu to check INPUTs 1-5, and confirm you have selected the correct input.</li> <li>Check the front panel VOLUME LEVEL indicator to confirm whether the MUTE button has been pressed, or if the sound volume has been set to its minimum setting.</li> <li>Confirm that the digital sound projector's main power is turned ON and the first the formation of the sound volume has been determined by the first the first term of the sound of the sou</li></ul>	P19 P10 P10
	<ul> <li>that the front panel's POWER ON indicator (Blue) is lighted.</li> <li>Sound has a poor surround effect <ul> <li>Confirm whether the audio mode has been set to "Mono" for monaural sound.</li> </ul> </li> </ul>	P26
	<ul> <li>Confirm whether the audio mode has been set to "Stereo" for stereo sound.</li> <li>Check the playback source to confirm that it is a multi-channel source.</li> </ul>	P25
	<ul> <li>Sound has poor balance</li> <li>Confirm that the proper room sound setting has been chosen.</li> <li>If the digital sound projector has been physically moved, or if the furniture in the room been significantly rearranged or changed, consult your installation technician to have the digital sound projector recalibrated for the new room environment.</li> </ul>	P32
	No sound from the connected sub-woofer, or sound volume is too low • Confirm whether the sub-woofer's output level has been set low.	P30
	<ul> <li>Recording isn't possible on the connected components</li> <li>If the playback source is a digital signal, it may be protected with a copyguard function, in which case it cannot be recorded. In this case, use an analog connection between the playback component and recording component, and record the source in analog mode.</li> </ul>	
Video Problems?	Digital sound projector menu screens don't appear • Confirm that the proper video input has been selected on the television monitor.	
?	<ul> <li>No image is visible on the connected TV monitor.</li> <li>Confirm that the proper video input has been selected on the television monitor.</li> </ul>	

P16



#### Can't recharge remote control unit

- Check the recharge indicator in the upper right corner of the remote control unit's touch panel to confirm whether the remote control unit is sitting on the recharger and recharging correctly.
- If the remote control unit's battery won't hold a sufficient charge to allow use of the remote control unit even after proper recharging, the unit's Lithium-ion battery may require replacing. In this event, consult your authorized Pioneer service center. The remote control unit's Lithium-ion battery cannot be purchased at any location other than an authorized Pioneer service center.

#### Remote control unit doesn't work

- Check that the main power switch is turned on, the power cord is connected securely, and the front panel's POWER ON (Blue) or STANDBY (Red) indicator is lighted.
- Check the remote control unit's remaining charge indicator to confirm that **P14** the remote control unit's battery is properly recharged.
- You may be using the remote control too far from the sensor (Try moving closer to the digital sound projector).
- Remote operation may become unreliable if direct sunlight, a fluorescent lamp, or other strong light source is striking the remote control sensor on the front panel.

#### Remote control unit doesn't operate connected Pioneer DVD recorder

• Depending on the model, some functions may not be supported.

#### Touch panel menus don't change

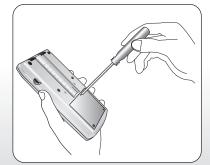
 If the remote control menu screens do not change, try using the following procedure to reset the remote control unit. Resetting the remote control unit will not erase recorded settings.

### If the unit does not operate normally due to external effects (such as static electricity)

• Disconnect the power plug from the outlet and insert again to return to normal operating conditions.

#### **Resetting the Remote Control Unit**

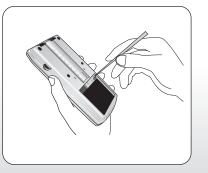
**1** Use a Phillips screwdriver to remove the screw on the back panel of the remote control unit.





Remove the panel.

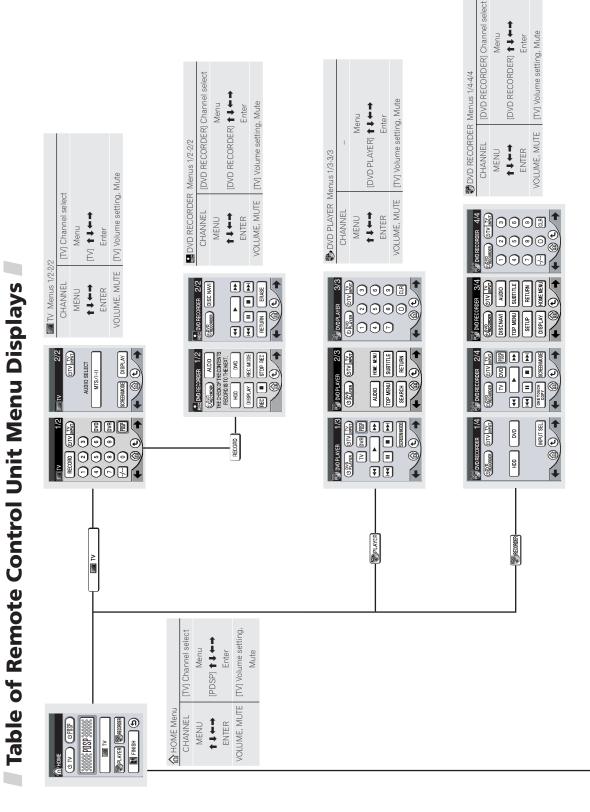
Use a narrow pointed object to press the RESET button.



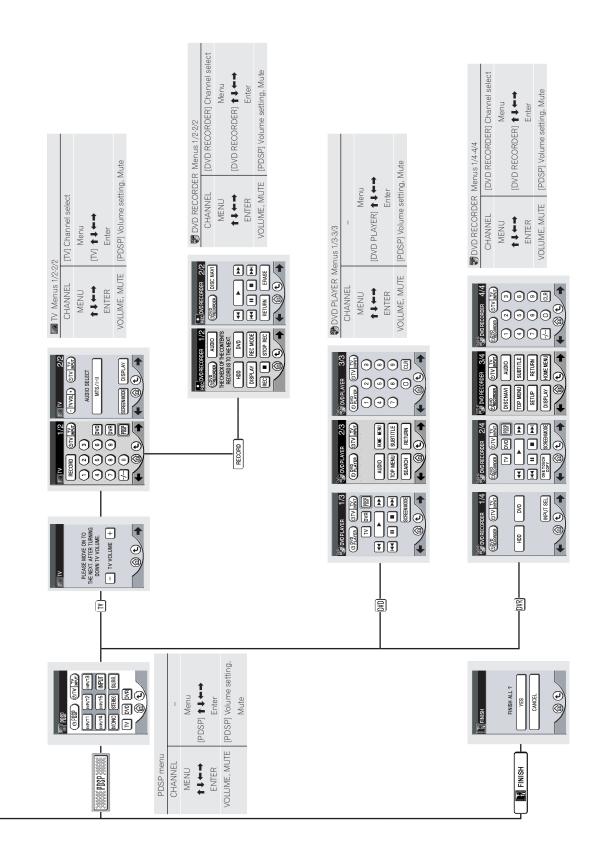
**Additional Information** 

### Table of Remote Control Unit Menu Displays

The following table shows all operating menu displays on the remote control unit's touch panel display. Depending on the way you navigate through the operating menus, the component corresponding to the remote control unit's buttons (hard keys) will change. To confirm what component and functions are supported, consult the remote control unit's function table for each operating menu display.









### Index

The following index of keywords has been collected based on the four following item categories:

- 1. Terms displayed in menus
- 2. Terms on front panel / rear panel
- 3. Symbols and terms on remote control unit / touch panel
- 4. Terminology in these operating instructions

#### Terms displayed in menus

page
All Ch Tone Control
Aux Center
Bass
Bass Management
Center width
Delay
Dimension
Dolby Digital
Image width
LFE
Lipsync delay
Memory
Mono
Noise Source
Panorama
Pro Logic
PLII Mode
PLII Movie
PLII Music
Recall from
Recall Memory
Status
Stereo
Stereo Mode
Sub Woofer
Surround Setup
System Setup
Treble

#### Terms on front panel / rear panel

page
COAXIAL 12
INPUT 1 – 5 12
MONITOR OUTPUT 12
OPTICAL 12
OUTPUT OPTICAL 12
POWER ON 10
RS-232C
STANDBY 10
SUB WOOFER 1 OUTPUT 12
SUB WOOFER 2 OUTPUT 12
VOLUME LEVEL 10

#### Symbols and terms on remote control unit / touch panel

toutin pane.	
	page
CHANNEL	
CONTRAST	
DVD PLAYER	
DVD RECORDER	
ENTER	
FINISH	
HOME	
INPUT	
MENU	
MONO	
MUTE	
PDSP	
RECORD	
RESET	
SETUP	
STEREO	
SURR.	
τν	
VOLUME	
VZZZ	
<b>P</b>	
<b>D</b> -	
←→	
<u>ه</u>	

#### Terminology in these operating instructions

	page
Beam control technology	6
Composite connector (video input)	
Dolby Digital	7
DTS	
Front Grille	
Lithium-ion battery	
Main power switch	
Power cord	
Pro Logic II	
Recharger	
Remote control signal sensor	
Reset	
S connector (video input)	13



### AFTER-SALES SERVICE FOR PIONEER PRODUCTS

Please contact the dealer or distributor from where you purchased
the product for its after-sales service (including warranty conditions)
or any other information. In case the necessary information is not
available, please contact the Pioneer's subsidiaries (regional service
headquarters) listed below:

<u>PLEASE DO NOT SHIP YOUR PRODUCT TO THE COMPANIES</u> at the addresses listed below for repair without advance contact, for these companies are not repair locations.

AMERICA PIONEER ELECTRONICS (USA) INC. CUSTOMER SUPPORT DIVISION P.O. BOX 1760, LONG BEACH, CA 90801-1760, U.S.A. CUSTOMER SERVICE HOTLINE : (800) 421-1404

EUROPE PIONEER EUROPE NV EUROPEAN SERVICE DIVISION HAVEN 1087, KEETBERGLAAN 1, B-9120 MELSELE, BELGIUM

ASEAN PIONEER ELECTRONICS ASIACENTRE PTE. LTD. SERVICE DEPARTMENT 253, ALEXANDRA ROAD #04-01 SINGAPORE 159936

JAPAN AND OTHERS PIONEER CORPORATION (HEAD OFFICE) CUSTOMER SUPPORT CENTER 4-1, MEGURO 1-CHOME, MEGURO-KU, TOKYO 153-8654 JAPAN S016P en

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